

IN THE CLAIMS

Please amend the claims as follows:

1. (ORIGINAL) A process of collecting pigment nanoparticles comprising forming a vapor of a pigment that is solid at room temperature, the vapor of the pigment being provided in an inert gaseous carrying medium, solidifying at least some of the pigment within the gaseous stream, moving the pigment nanoparticles in a gaseous carrying environment through a dry mechanical pumping system, and while the particles are within the dry mechanical pumping system or after the nanoparticles have moved through the dry pumping system, contacting the pigment nanoparticles with an inert liquid collecting medium.
2. (ORIGINAL) The process of claim 1 wherein the pigment nanoparticles comprise an inorganic pigment.
3. (ORIGINAL) The process of claim 1 wherein the pigment nanoparticles comprise an organic pigment.
4. (ORIGINAL) The process of claim 2 wherein the inert liquid collecting comprises an organic liquid.
5. (ORIGINAL) The process of claim 3 wherein the inert liquid collecting comprises an organic liquid.

6. (ORIGINAL) The process of claim 2 wherein pigment particles within the dry mechanical pumping system are contacted with an inert liquid collecting medium,
7. (ORIGINAL) The process of claim 3 wherein pigment particles within the dry mechanical pumping system are contacted with an inert liquid collecting medium.
8. (ORIGINAL) The process of claim 2 wherein pigment particles are contacted with an inert liquid collecting medium after leaving the dry mechanical pumping system.
9. (ORIGINAL) The process of claim 3 wherein pigment particles are contacted with an inert liquid collecting medium after leaving the dry mechanical pumping system.
10. (CURRENTLY AMENDED) The process of claim 1 ~~10~~ wherein the nanoparticles are collected by physical filtration.
11. (CURRENTLY AMENDED) The process of claim 1 ~~11~~ wherein a vacuum system is installed to provide additional driving force to collect nanoparticles by physical filtration.

12. (ORIGINAL) An apparatus for providing dispersions of ultrafine pigment particles having an average size of between 0.5 and 100 nanometers comprising:

- a) a source of vaporized pigments connected to a mechanical pump and a collection vessel, the source of vaporized pigments providing an stream of non-reactive gas flow away from the source and towards a mechanical pump;
- b) a source of organic pigment, inorganic pigment and/or pigment precursor into the source of vaporized pigment;
- c) a source of non-reactive gas to carry pigment material towards the mechanical pump;
- d) a fluid source for a fluid to collect pigment particles and/or condense pigment vapor into particles;
- e) a mechanical pump for moving the non-reactive gas with pigment material and the fluid to collect pigment particles and/or condense pigment vapor into particles; and
- f) a contact zone for the i) non-reactive gas and pigment material and ii) the fluid to collect pigment particles and/or condense pigment vapor into particles;

wherein the contact zone is within the mechanical pump or after the mechanical pump.

13. (CURRENTLY AMENDED) The apparatus of claim 12 ~~13~~ having a source of pigment precursor and a source for a reactive gas stream to effect reaction of pigment precursor particles, to provide pigment particles.

14. (CURRENTLY AMENDED) The apparatus of claim 12 ~~14~~ wherein the fluid is introduced into the mechanical pump to first contact the non-reactive gas with pigment material.

15. (CURRENTLY AMENDED) The apparatus of claim 12 ~~15~~ wherein the non-reactive gas is removed from the mechanical pump after pigment material content in the gas has been reduced by contact with the fluid.
16. (CURRENTLY AMENDED) The apparatus of claim 15 ~~16~~ wherein a liquid recycling system to return liquid into the mechanical pump is provided so that recycled liquid with particulate pigment content comprises the recycled liquid.
17. (ORIGINAL) The apparatus of claim 16 wherein the source of liquid provides an organic liquid to the mechanical pump.

ISSUES IN THE OFFICE ACTION

Certain references listed in the specification have been identified as not being considered as they were not submitted in proper IDS format with a PTO-1449 and copies thereof. Those references have been reviewed and are merely deep background information and have been determined to not be material to the issues of patentability of this Application. Art of record cited by the Applicant and by the Examiner have been material to the issues of patentability.

Certain text in the application in the format of a hyperlink has been cancelled, while the substantive information of that reference has been retained in the specification.

Certain claim dependency issues have been identified by the Examiner, and those and other dependency issues have been corrected in the claims.

Issues Regarding the Drawings Detailed in Paragraphs 3, 4 and 5

A number of issues have been raised with regard to the drawings.

1. The proposed corrections to the drawings have been reviewed and deemed acceptable. Upon a Notice of Allowance, new formal drawings with those corrections will be submitted.

2. The drawings (Figures 2A and 2B) were objected to as containing reference signs that were not mentioned in the description. At the same time, the Office Action indicated that cancellation of Figures 2A and 2B was not being performed, as "expunging of original disclosure must be accompanied by a petition, MPEP 724.05 and 724.06." This objection is in error.

First, Applicant is not expunging a figure. The figures are being cancelled as superfluous and directed to subject matter that is not relevant or material to the disclosure. Second, the disclosure is being cancelled, not expunged. No petition is needed when material is cancelled. Expunging is a completely different administrative concept than canceling. This was pointed out in a telephone interview with Examiner Duane Smith on 27 April 2004. A copy of the relevant MPEP sections is enclosed with this Amendment.

Expunging is performed when the entire file has all evidence of specific material removed from the file and placed under a protective physical arrangement that can be accessed only through permission, court activity or administrative activity. Anyone viewing the formal record of the file of the PTO

official copy of the Application would not be able to ascertain the content of the expunged information without authorized access. When subject matter is cancelled, as in the present case, the PTO official file record will still allow anyone accessing the file to view the material that was cancelled. In the situation of mere cancellation, which is the present fact situation, no petition is needed.

As figures 2A and 2B should be properly cancelled by the previous Amendment and the request repeated herein, there is also no need to amend the specification to define the numbers used in the cancelled figures.

All issues with regard to the Figures, except for the submission of corrected drawings upon allowance, have been addressed.